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EXAMINER

KLEBE, GERALD B

ART UNIT PAPER NUMBER

3618

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Please find below and/or attached an Office communication concerning this application or proceeding.



<b>Office Action Summary</b>	<b>Application No.</b> 10/814,747	<b>Applicant(s)</b> SANKRITHI, MITHRA M.K.V.	
	<b>Examiner</b> Gerald B. Klebe	<b>Art Unit</b> 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-81 is/are pending in the application.
- 4a) Of the above claim(s) 14-19, 21-27, 40, 46, 49-52, 71-74 and 79-81 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 20, 28-39, 41-45, 47, 48, 53-70 and 75-78 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

*G B Klebe*  
*8 January 2006*

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |



## **DETAILED ACTION**

### ***Election / Restriction Response***

1. a. Applicant's election filed 10/20/2005 of Species Group XIII, Figure 15 (with Figures 22, 23, 24A, and 24B considered generic and also applicable to Species Group XIII), claims 1-7, 10-21, 23-25, 28-48, 51-78 and 81 reading thereon is acknowledged.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Consequently, the restriction is held to be proper.

b. With regard to the definition of species as given in the prior Office Action, upon further consideration it appears the Figure 23, rather than being generic to the various species, more properly should be grouped with the Figures that define Species I since Figure 23 shows the embodiment having pulley and linking cable connecting the foot supports.

c. Regarding Applicant's identification of the claims considered as reading on the elected species XIII, the examiner disagrees, as follows.

The examiner considers that claims 8 and 9 read on the elected species but that the following claims, for the reason given for each, do not read on the elected species:

Claims 17-19, 21, 23, and 26-27, the left and right foot support connecting means permitting pitch-axis rotation of the left and right foot supports, and having pulley means and linking cable connecting the foot supports, respectively, are considered as reading on the Species Group I, Figs 1-3 and 23;

Claim 40, having boot binding means on the left and right foot supports, reads on Species Group IV, Fig 8;



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Claims 52 and 81, wherein the lower post connecting means provides a connection with variable angle between the ski and the lower post, and further comprising surface-engaging edge means on the bottom of the ski, read on Species Group VI, Fig 10;

Claims 14-16, and 23-25, the left and right foot support connecting means being coupled, read on Species Group IX, Fig 13a;

Claims 46 and 51, providing a detachable connection between the ski and the lower post, and wherein the handhold connection means comprising left and right connecting rods to the top of the upper post, read on Species Group X, Fig 13b;

Claims 49-50, comprising telescoping means between the left and right ends of the handlebar and comprising folding means for folding the left and right ends of the handlebar together read on Species Group XII, Fig 14;

Claim 22, comprising rack and pinion linking means coupling left and right foot supports reads on Species Group XIV, Fig 16;

Claim 71, comprising hand control means, reads on Species Group XVI, Fig 18;

Claims 72-73, comprising foot control means and braking control means, read on Species Group XVII, Fig 19.

Therefore, claims 14-19, 21-27, 40, 46, 49-52, 71-73, and 79-81, being drawn to non-elected species, are hereby withdrawn from further consideration.

An examination on the merits of claims 1-13, 20, 28-39, 41-45, 47-48, 53-70 and 74-78, reading on the elected species XIII, follows.



*Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of claim 43-45 wherein the upper post connecting means includes (claim 43) means for setting the height of the handhold means at different levels and (claim 44) comprises a telescopic slidable connection between the upper post and lower post and includes (claim 45) a quick-release mechanism must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Appropriate correction is required. No new matter should be entered.



***Claims Objections***

3. The claims are objected-to for the following:

a. Applicant is advised that should claim 1 be found allowable, claim 78 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

b. Minor informalities: i) in claims 1 and 78, at line 13: the phrase "substantially located" is preferably --located substantially--;

ii) in claim 6 line 1, "TEFLON" is a trademark. It should be capitalized wherever it appears and be accompanied by the generic terminology, such as being a surface coating of a non-stick synthetic material of flourine-containing resins. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks;

iii) in claims 28, 30, 32, and 34 the phrases "on the one hand" and "on the other hand" appear to be superfluous, adding nothing to the claim;

iv) in claim 43 line 1, "connection" should be --connecting--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.



Claims 37, 43-45, 11, and 60-61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 37 in line 2 recites the limitation "said foot plate"; it is not clear to which of the two foot plates this is referring.

Appropriate correction is required.

For the purposes of further examination on the merits this will be interpreted as referring back to the respective left and right foot plates of the pogo-ski.

Claim 43 in line 2 recites the limitation "the height" [of said handhold means]; there is insufficient antecedent basis for this limitation in the claim.

Claim 11 lacks complete recitation of its dependency and thus the recited limitation "said lower post" is without antecedent basis in the claim.

Appropriate correction is required.

For the purposes of further examination on the merits, claim 11 will be interpreted by the examiner as if depending from claim 1.

Claims 60-61 recite, respectively, "downhill type ski" and "ski-jumping type ski"; the use of the word "type" renders the claim indefinite because the claim thereby includes elements not actually disclosed (those elements encompassed by "-type"), thus rendering the scope of the claim(s) unascertainable. See MPEP sec. 2173.05(d).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:



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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3, 5, 7, 10, 12-13, 20, 36, 41, 47-48, 53, 58-60, 62, 65-69 and 78 are rejected under 35 U.S.C. 102(b) as being anticipated by Winchell (US 4087106).

Winchell discloses a pogo-ski (see Fig 17) comprising in combination:

(re: **claims 1 and 78**) a ski (Fig 17, item 350) providing means for sliding on a sliding surface (not shown; but refer col 11, lines 62ff);

a lower post (210'') projecting upward from the ski and connected to the ski by lower post connecting means (taken as 213'' and the unnumbered bracket bolted to the top of the ski; refer col 11, line 66 to col 12, line 2);

a left foot support (242'') connected above the ski to the lower post (210'') by left foot support connecting means (216'') which left foot support (242'') serves as means for supporting the left foot of a user;

a right foot support (240'') connected by right foot support connecting means (214'') to the lower post above the ski which right foot support serves as means for supporting the right foot of the user; and,

handhold means (208'') for being holdable by at least one hand of the user, which handhold means are connected by handhold connection means to an upper post (206''; refer col 11, lines 65-68), which upper post (206'') is connected by upper post connecting means (204'')



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to the lower post (210'') and which upper post (206'') is located substantially above the lower post (210''); and,

(re: **claim 2**) wherein the sliding surface (not shown) is a snow surface (refer col 11, lines 62ff); and,

(re: **claim 3**) wherein the sliding surface is a frozen surface (a snow surface is, by definition, a frozen surface since snow is a frozen material); and,

(re: **claim 5**) wherein the sliding surface is a low-friction solid sliding surface (see Fig 16 and refer to the associated text); and,

(re: **claim 7**) wherein the majority of the user's weight is supported by the left and right foot supports and the balance is supported by the handhold means, when riding in a non-accelerating condition (Examiner's note: this is a functional recitation, lacking in structure to distinguish the invention over the prior art, hence is given no patentable weight provided only that the prior art can perform the function. Since all of the user's weight is borne by the vehicle of Winchell (-106) and since the only supports for the weight are the foot supports and the handhold, then, clearly the reference satisfies this functional recitation.); and,

(re: **claim 10**) wherein the lower post (210'') is of substantially circular cross-section (as depicted, the section of the tube making up item 210'' clearly appears to be substantially circular); and,

(re: **claim 12**) wherein the left foot support (242'') is located on the left side (considered when facing in the direction of the vehicle forward portion) of the lower post (210''); and,

(re: **claim 13**) wherein the right foot support (240'') is located on the right side (considered when facing in the direction of the vehicle forward portion) of the lower post; and,



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(**re: claim 20**) wherein the left foot support connecting means (216'') includes left translational motion permitting means (taken as the pivot connections of item 216'' on its forward end at the lower post (210'') and on its rearward end at the not separately numbered pivotable connection of 216'' with the left rear ski (356) for permitting the left foot support to move in a direction including a vertical component, and wherein the right foot support connecting means includes right translational motion permitting means for permitting the right foot support to move in a direction including a vertical component (best understood from a comparison of Figs 4 and 5 (shown for a wheeled embodiment), that the left foot support can be driven below the right foot support under appropriate circumstances, such as in traversing a hill with the right foot support being uphill and thus vertically above the downhill left foot support); and,

(**re: claim 36**) wherein the left foot support and the right foot support each include a foot plate (in Fig 17, taken as the portions of the foot supports 240'' and 242'' that are shown as coarse mesh structures) on which the left foot and right foot of the user, respectively, can be supported; and,

(**re: claim 41**) wherein the upper post (Fig 17, item 206'') is of substantially circular cross-section (as depicted in the figure the upper post appears to be a tube of substantially circular section); and,

(**re: claims 47 and 48**) wherein (**re: claim 47**) the handhold means (Fig 17, item 208'') comprises left and right handlebars (not separately numbered) suitable for holding by the left and right hands, respectively, of the user and wherein the handhold connection means comprises means (not separately numbered) for connecting the left and right handlebars to the top of the



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upper post; and wherein (re: claim 48) the left and right handlebars include contoured surfaces which can be gripped by the fingers of the left and right hands of the user; and,

(re: **claim 53**) wherein the ski (Fig 17, item 350) has a ski shovel at its forward extremity (as shown); and,

(re: **claim 58**) further comprising sharp-cornered edges along the lower left and right corners of the ski when viewed in transverse cross-section (although not shown in transverse section, but as depicted in Fig 17, the lower edges of the sides of the ski are clearly interpretable as being sharp corners, typical of downhill ski edges); and,

(re: **claim 59**) wherein the ski is thicker near the location of the lower post connecting means than at locations near the forward and aft ends of the ski (clearly, as shown in Fig 17 the ski thickness is tapered forward and aft from its thickest portion which is near the location of the lower post connection to the ski); and,

(re: **claims 60 and 62**) wherein the ski is a downhill ski (as shown in Fig 17, the ski shape depicted is representative of a downhill ski (claim 60) and (as is clear from its length compared to the ski runners on the rear as shown on the depiction in Fig 17) it is a short ski (claim 61); and,

(re: **claims 65-69**) wherein the user can impart rolling moments onto the ski by (claim 65) shifting his/her weight laterally; by (claim 66) shifting the amount of his/her weight acting on the left foot support compared with that on the right foot support; can (claim 67) impart a rolling moment on the ski by applying a rolling moment to the handhold means; can (claim 68) impart a yawing moment on the ski by pushing forward with a foot on either the left foot support or the right foot support; and can (claim 69) impart a yawing moment on the ski by applying a yawing moment to the handhold means. (Examiner's notes: the recitations of claims 65-69 are



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functional, lacking structure to define over the structure found in the prior art and therefore are given no patentable weight. Since the apparatus of the reference includes structures whereby the recited moments can be applied by the user to the apparatus and thereby effect the functions recited in the claims 65-69, the reference meets the claim recitations.).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 11 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106).

As discussed above, Winchell (-106) discloses all of the features of claim 1 from which claim 11 and claim 42 each depend. As is clear from the depictions of the lower post and the upper post in Figure 17, Winchell's lower post (re: claim 11) and upper post (re: claim 42) are each substantially circular in cross-section rather than of non-circular cross-section.

However, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the lower post and the upper post cross-sections of Winchell to be non-circular rather than circular since it has been generally held to be within the skill of a worker in the art to make an element any shape as a matter of obvious engineering choice when the shape is not for any stated reason or any particular purpose and the modification to non-circular section posts would be expected to better resist twisting during steering than would the circular section posts disclosed by Winchell.



9. Claims 4 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106) in view of Rappaport (US 6739606).

(Re: claim 4) As discussed above, Winchell (-106) discloses all of the features of claim 1 from which the claim 4 depends. Winchell's pogo-ski is made for skiing over a snow sliding surface rather than on the surface of water.

However, Rappaport teaches a pogo-ski that is made for skiing on water (refer Fig 9 and the associated text).

Therefore, it would have been obvious to one of ordinary skill in the art to have substituted the pontoon runners taught by Rappaport for the snow runners of Winchell in order to adapt Winchell's pogo-ski for use in water skiing.

(Re: claim 64) As discussed above, Winchell (-106) discloses all of the features of claim 1 from which claim 64 depends. Winchell lacks explicit disclosure wherein the ski is a water-ski.

However, Rappaport teaches a pogo-ski for use on water wherein the ski is a water-ski (refer Fig 9 and associated text).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the pogo-ski disclosure of Winchell to further disclose the device for using a water-ski in accordance with the teachings of Rappaport in order to provide the device means for use in water-skiing environments as suggested in the reference at column 7, line 11ff.

10. Claim 6 is rejected under 35 USC 103(a) as being unpatentable over Winchell (US 4087106) in view of Holley (US 3400643).



As discussed above, Winchell discloses a pogo-ski satisfying all of the features of claim 1 from which claim 6 depends.

Winchell lacks explicit disclosure wherein the pogo-ski is usable on a low friction solid sliding surface wherein the surface uses a non-stick coating, particularly, TEFLON™.

However, Holley teaches an artificial low-friction solid skiing surface wherein the surface may be coated with TEFLON™ (refer col 1, lines 11-17 and 20-23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the disclosure of Winchell to further teach the use of the pogo-ski on an artificial sliding surface wherein the sliding surface comprises a TEFLON™ surface coating in accordance with the teachings of Holley in order to enable use of the pogo-ski when snow-, ice- or water-surfaces on which to ski are temporarily lacking or unavailable as suggested by the reference at column 1, lines 26-45.

11. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106) in view of Rygiel (US 4773659).

As discussed above, Winchell (-106) discloses all of the features of claim 1 from which claims 8 and 9 each independently depend. Winchell lacks explicit disclosure wherein the lower post connecting means includes a spring and a damper acting between the lower post and the ski.

However, Rygiel teaches a pogo-ski (Fig 1, item 3) having a ski (1), a lower post (consider the embodiment shown in Fig 10, wherein the lower post is taken as the shaft 5b) projecting upward from the ski and connected to the ski by lower post connecting means (Fig 2, item 8; for details see Fig 7 where it is shown that shaft 5b is connected by bolt 13 to the item 10a which is bolted to ski, item 1 and refer to the associated text at col 4, lines 43), a foot support



(Fig 2, item 2, which includes the portion 6 that is joined to the lower post 5b by the foot support connecting means discussed herein below) for supporting (simultaneously both) the left and right feet of a user; and foot support connecting means (taken as any one of the connections shown in Figs 17-20) connecting the foot support (2, which includes the portion 6, as well) to the lower post (5b) above the ski (as shown best in Fig 7) and wherein the lower post connecting means (8) includes a spring (20; see Fig 7 and refer col 4, lines 41-43) and a damper (10b; see Fig 7 and refer col 4, lines 11-13) acting between the lower post (5b) and the ski (1) at the location where the foot support connecting means (taken as any one of the connecting means shown in Figs 17-20) connects to the lower post (5b; where the connection, is best understood from Fig 7 and the discussion at col 4, lines 3-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the pogo ski disclosure of Winchell to include a spring acting between the lower post and the ski at the location where each of the foot support connecting means connects to the lower post in accordance with the teachings of Rygiel in order to cushion and dampen (with the TEFLON™ bushing 10b) the wear and tear on the connection between the lower post and the ski as suggested by the reference at col 4, lines 11-13, and to bias (with spring 20) the ski (1) into a nose upward orientation when the ski is airborne as suggested by the reference at column 4, lines 41-44.

12. Claims 28-29 and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106) in view of Barton et al. (US 3338589).

As discussed above, Winchell (-106) discloses all of the features of claim 1 from which claims 28-29 and 32-33 each individually depend. Winchell lacks explicit disclosure wherein



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each of the left and right foot support connecting means provides a spring in the connection between the foot support and the lower post and further comprising spring means providing a spring force with a vertical component between the ski and the respective foot support.

However, Barton et al. teaches a skiing vehicle having left and right foot supports (Figs 1 and 2; items 27) and foot support connecting means (30) between the foot support and the lower post (35) of the ski runners (50) wherein each of the left and right foot support connecting means provides a spring (48) in the connection between the foot support (27) and the lower post (35) and further comprising spring means providing a spring force with a vertical component (as is clear from Figs 2-5 the spring force has a vertical component) between the ski and the respective foot support.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the pogo-ski as disclosed by Winchell to further include a spring between each of the left and right foot supports and the respective lower post wherein the spring means provides a spring force with a vertical component between the ski and the respective foot support in accordance with the teachings of Barton et al. in order to soften shock and vibrations that are encountered when skiing on rough terrain as suggested by the reference at column 5, lines 46-51.

13. Claims 30-31 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106) in view of Williams et al. (US 4047732).

As discussed above, Winchell (-106) discloses all of the features of claim 1 from which claims 30-31 and 34-35 each individually depend. Winchell lacks explicit disclosure wherein each of the left and right foot support connecting means provides a damper in the connection



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between the foot support and the lower post and further comprising damper means providing a damping force with a vertical component between the ski and the respective foot support.

Furthermore, Winchell teaches that wheeled and ski-runner equipped vehicles of this type are analogous arts sharing similar problems and solutions (see Figures 11 and 17 and refer col 1, lines 6-12 and 17 to 23 and also col 2, lines 16-18).

However, Williams et al. teaches a pogo-ski having left and right foot supports and foot support connecting means between the foot support and the lower post wherein each of the left and right foot support connecting means provides a damper in the connection between the foot support and the lower post and further comprising damper means providing a damping force with a vertical component between the ski and the respective foot support.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the pogo-ski as disclosed by Winchell to further include a damper between each of the left and right foot supports and the respective lower post wherein the damper means provides a damping force with a vertical component between the ski and the respective foot support in accordance with the teachings of Williams et al. in order to quickly absorb and curtail the user's experiencing of severe shock and vibration that are often encountered when downhill skiing on rough terrain.

14. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106) in view of Brown (US 2593974).

As discussed above, Winchell (-106) discloses all of the features of claim 36 from which claim 37 depends. Winchell lacks explicit disclosure wherein each of the left and right foot supports include foot enclosing surfaces connected to the respective foot plate and that



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enclose the sides and top of the left and right foot, respectively, of the user.

However, Brown teaches a pogo-ski (Fig 1, item 10) having left and right foot plates (30) each of which include foot enclosing surfaces (Fig 3) connected to the respective foot plate that enclose the sides (taken as elements 33) and top (taken as element 45) of the left and right foot, respectively, of the user.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified each of the left and right foot support plates of the pogo-ski of Winchell to have foot enclosing surfaces enclosing the sides and top of the respective feet of the user as taught by Brown in order to better secure the feet of the user on the foot support plates during skiing maneuvers.

15. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106) in view of Philippar (US 2392098).

As discussed above, Winchell (-106) discloses all of the features of claim 36 from which claim 38 depends. Winchell lacks explicit disclosure wherein each of the left and right foot supports include strap means that restrain lateral and upward movement of the foot and that are connected to the respective foot plate.

However, Philippar teaches a pogo-ski having left and right foot supports wherein each of the foot supports include straps which restrain lateral and upward movement of the respective foot of the user.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified each of the left and right foot supports of the pogo-



ski of Winchell to include straps as taught by Philippar in order to better secure the feet of the user on the foot supports during skiing over rough terrain.

16. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106) in view of Knapschafer (US 2002/0149175).

As discussed above, Winchell (-106) discloses all of the features of claim 36 from which claim 39 depends. Winchell lacks explicit disclosure wherein each of the left and right foot supports include a toe clip connected to the foot plate (of the binding).

However, Knapschafer teaches a foot support (binding) for use on a ski (refer para [0003] and having a toe clip (Fig 1, item 11) securable to the foot plate of the binding (not shown; refer to the associated text at para [0017]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified each of the left and right foot supports of the pogo-ski of Winchell to include toe clips connected to the foot plate of the respective foot supports as taught by Knapschafer in order to have a quick-connecting securement of the feet of the user on the foot supports during skiing.

17. Claims 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106) in view of Parkinson (US 4643444).

As discussed above, Winchell (-106) discloses all of the features of claim 1 from which the claims 43-45 depend. Winchell lacks explicit disclosure of the upper post connection means including (claim 43) means for setting a height of the handhold means at different levels; comprising (claim 44) a telescopic slidable connection between the upper post and the lower post; and (claim 45) having a quick-release mechanism for setting the height of the handholds.



However, Parkinson teaches a steering handhold apparatus (Fig 1, item 10) for a skiing device comprising a lower post (item 15) and an upper post (13) and having means (16) for setting a height of the handhold means (11) at different levels and comprising a telescopic slidable connection (refer col 3, lines 51-55) between the upper post and the lower post (as shown) and wherein the means for setting is a quick-release mechanism (combination of 16 and 17; refer col 3, lines 51-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the pogo-ski upper and lower post mechanism of Winchell in accordance with the teachings of Parkinson to comprise a slidable telescopic connection between the upper post and the lower post in order to be able to adjust the height of the handhold relative to the lower post to accommodate users of different stature and to further comprise a quick-release mechanism for setting the height of the handhold at different levels so that the settings can be made conveniently and without the need to employ tools to effect the adjustments.

18. Claims 54-57 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106) in view of in view of Hunter (US 5096217).

**(Re: claims 54-57)** As discussed above, Winchell (-106) discloses all of the features of claim 1 from which the claims 54-57 each depend. Winchell lacks explicit disclosure wherein the ski has a ski-shovel at its aft extremity; wherein the ski has camber and further comprises a low-friction lower running surface; and wherein the ski has outwardly concave curved edges when viewed in planview.



However, Hunter discloses a ski with features of: (re: claim 54) a ski shovel at its aft extremity to shorten the ski's contact length to enable tighter turns in steering; having (re: claim 55) camber where the user's feet are placed in order to distribute load more uniformly along its entire running surface; further having (re: claim 56) a low-friction lower running surface; and wherein the planview of the ski (re: claim 57) shows it having outwardly concave curved edges.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the features of the ski of the pogo-ski of Winchell in accordance with the teachings of Hunter to have (**re: claim 54**) a ski shovel (9) at its aft extremity to shorten the ski's contact length to enable tighter turns in steering the pogo-ski as suggested by the reference at column 7, lines 20-28; to have (**re: claim 55**) camber (11) where the load of the pogo-ski is concentrated on the ski in order to more uniformly distribute the load along the entire running surface of the ski as suggested by the reference at column 7, lines 50ff; to further comprise (**re: claim 56**) a low-friction lower running surface to extend the serviceable life of the ski as suggested by the reference at column 9, line 64 to column 10, line 7; and to have a ski planview (**re: claim 57**) wherein it has outwardly concave curved edges in order to improve the ability of the user to steer/turn the ski without "unweighting" it as suggested by the reference at column 5, lines 1-4.

(**Re: claim 61**) As discussed above, Winchell (-106) discloses all of the features of claim 1 from which claim 61 depends. Winchell lacks explicit disclosure wherein the ski is a ski-jumping ski.

However, Hunter discloses a monoski with shape features related to use in ski-jumping.



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Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the disclosure of Winchell to explicitly disclose the use of a ski-jumping ski in accordance with the teachings of Hunter in order to provide the forward end of the ski with a gently upturned shovel to avoid having the ski of the pogo-ski dive into the snow when landing after having become airborne during maneuvers and to have a long and straight rear shovel in order to provide improved directional stability during takeoff, while airborne and upon landing after becoming airborne as suggested by the reference at column 3, lines 20ff.

19. Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106) in view of Geary (US 6783134) and further in view of Hunter (US 5096217).

As discussed above, Winchell (-106) discloses all of the features of claim 1 from which claim 63 depends. Winchell lacks explicit disclosure wherein the ski is a snowboard.

However, Hunter teaches a monoski having the features of upturned front and rear shovels for the purpose of enhanced maneuverability of the board and Geary teaches a pogo-ski using a board shaped as a snowboard with upturned front and rear shovels.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the pogo-ski of Winchell to use a snowboard as the ski in accordance with the teachings of Geary in order to provide a ski having the enhanced maneuvering features taught by Hunter with a gentle upward curving shovel on the forward end to prevent the ski from diving into the snow and a long gentle upward curve at the rear portion of the ski to shorten the snow contact length of the ski so as to improve its ability to make tighter turns.



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20. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106) in view of Horibata (US 5127672).

As discussed above, Winchell (-106) discloses all of the features of claim 1 from which claim 75 depends. Winchell lacks explicit disclosure of spring means in at least one of the lower post connecting means, or the left or right foot support connecting means enabling the user to deliberately and repeatedly bounce while skiing on the pogo-ski.

However, Horibata teaches a hopping ski comprising spring means in the foot support connecting means that enable the user to deliberately and repeatedly bounce while skiing on the device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the pogo-ski disclosure of Winchell to include spring means in at least one of the left or right foot support connecting means in accordance with the teachings of Horibata in order to help prevent ankle sprains in the user skiing on rough terrain as suggested by the reference at column 1, lines 57-60.

21. Claim 75 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106) in view of Sullivan et al. (US 6929267).

As discussed above, Winchell (-106) discloses all of the features of claim 1 from which claim 75 depends. Winchell lacks explicit disclosure of a safety strap suitable for connecting the pogo-ski to the user to prevent the pogo-ski from sliding away from the user in the event that the user falls from the pogo-ski.



However, Sullivan et al. teaches a pogo-ski having a tether (Fig 1, item 56) to secure the pogo-ski to the user and prevent it from sliding away from the user in the event that the user falls from the pogo-ski.

Therefore, it would have been obvious to one of ordinary skill in the art to have modified the pogo-ski of Winchell (-106) to include a tether in accordance with the teachings of Sullivan et al. in order to secure the pogo-ski to the user in the event the user falls from the pogo-ski as suggested by the reference at column 7, lines 16-21.

22. Claim 76 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106) in view of Monreal (US 4678445) and further in view of Waller (US 1559390).

As discussed above, Winchell (-106) discloses all of the features of claim 1 from which claim 76 depends. Winchell lacks explicit disclosure of a tow cable engagement means for engaging a tow cable for towing the pogo-ski along with the user riding thereon.

However, Monreal teaches that skis, snowboards, and water-skis are analogous arts sharing various structures, features and capabilities problems for solution (refer col 1, lines 21-45).

Furthermore, Waller teaches a water-ski comprising a tow cable engagement means for engaging a tow cable for towing the ski along with the user riding thereon.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the pogo-ski of Winchell to further comprise a tow cable engagement means for engaging a tow cable to tow the pogo-ski along with the user riding thereon in accordance with the teachings of Monreal and Waller in order to provide a tow in the event of an equipment failure during use that would cause the user to want to return to a repair



installation without having to use the steering or other features of the pogo-ski required in its usual performance.

23. Claim 77 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (US 4087106) in view of Geary (US 6783134).

As discussed above, Winchell (-106) discloses all of the features of claim 1 from which claim 77 depends. Winchell lacks explicit disclosure of a chairlift engagement means enabling the pogo-ski to hang from a chairlift while the user is riding thereon in a seated posture.

However, Geary teaches a pogo-ski having a chairlift engagement means (Figs 19 and 20, item 270) enabling the pogo-ski to hang from the chairlift while the user is riding the chairlift in a seated posture.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the pogo-ski of Winchell to further incorporate a chairlift engagement means as taught by Geary in order to support the weight of the pogo-ski while the user is returning to the top of the ski-run for another downhill trip as suggested by the reference at column 6, lines 51 to 65.

***Prior Art made of Record***

24. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. The prior art of Comden; of Lee; of Chen et al.; of Evequoz; of Winchell (-338); of Pedersen; of Suroff; of Annis; of Roessel; of Gebhardt; and of Noll each show features in common with some of the other structures of the inventive concept disclosed in the instant application.




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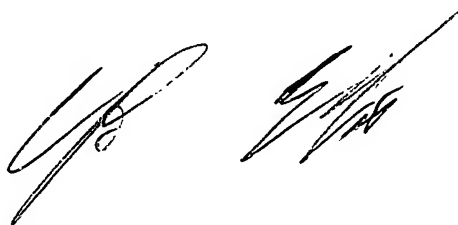
***Conclusion***

25. Any inquiry concerning this or earlier communication(s) from the examiner should be directed to Gerald B. Klebe at 571-272-6695; Mon.-Fri., 8:00 AM - 4:30 PM ET, or to Supervisory Patent Examiner Christopher P. Ellis, Art Unit 3618, at 571-272-6914.

Official correspondence should be sent to the following TC 3600 Official number as follows: 571-273-8300.

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gbklebe / Art Unit 3618 / 8 January 2006



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